

REMARKS

STATUS OF APPLICATION

No claims have been canceled and claims 47-51 have been added. Accordingly, claims 1-51 are pending in the present application. No new matter has been presented as a result of this amendment.

ALLOWABLE SUBJECT MATTER

The indication that claims 31-39 are allowed is noted with appreciation. Further, the indication that claims 7, 10, 15, 20-30, 44, and 45 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim is also acknowledged with appreciation. Claims 7, 15, and 20-22 have been so rewritten. Accordingly, claims 7, 15, and 20-30 are now in condition for allowance. Claims 10, 44, and 45 have not been so rewritten at this time, as it is believed the claims from which they depend are now in condition for allowance.

Applicants note that claims 8, 13, and 14, which have been amended to independent form, appear to be allowable except for the provisional double patenting rejection thereof. Claims 9, 11, and 12 depend from claim 8 and appear to be allowable except for the provisional double patenting rejection thereof. Claims 16-19 depend from claim 7, which has been amended to independent form and is indicated in the present Office Action as being allowable if so amended. Thus, claim 16-19 appear to be allowable except for the provisional double patenting rejection thereof. As discussed below, Applicants assert that the provisional double patenting rejection is improper.

Accordingly, it is believed that claims 8, 9, 11-14, and 16-19 are also in condition for allowance.

SPECIFICATION OBJECTION

The objection to the specification because the title is not descriptive is noted. The title has been amended as suggested in the present Office Action. Accordingly, it is respectfully requested that the objection to the specification be reconsidered and withdrawn.

CLAIM OBJECTION

The objection to claim 40 as containing the misspelled word “preformed” is noted. Claim 40 has been amended to overcome this informality as suggested in the present Office Action. Therefore, it is respectfully requested that the objection to claim 40 be reconsidered and withdrawn.

35 USC § 102 REJECTION

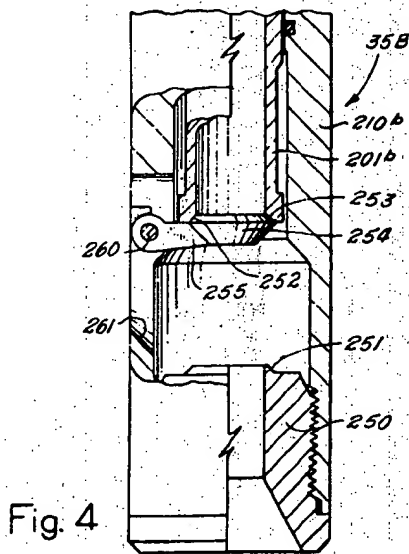
Claims 1, 3, 5, and 6 are allowable over US 3,990,511

The rejection of claims 1, 3, 5, and 6 under 35 U.S.C. § 102(b), as being anticipated by U.S. Patent 3,990,511 to Gazda (hereinafter referred to as “the Gazda patent”), is respectfully traversed for the reasons set forth below.

Claim 1, as amended, requires, among other things, an apparatus comprising a valve member and a sliding sleeve “having an upwardly facing seating element on which the valve member can seat.”¹ The Gazda patent teaches:

*The lower end of the valve operator tube 201b is provided with an internal **downwardly facing** annular valve seat surface 252 which is engageable with a seat surface 253 on a flapper valve 254. The flapper valve has an arm 255 hinged on a pin 260 within the upper end of a side pocket 261 formed along the side of the lower end portion of the bottom housing section 210b. When the valve 35B is closed as shown in FIG. 4, the flapper valve 254 engages the lower seat surface 252 on the lower end of the valve operator tube 201b.²*

As can be seen in FIG. 4 of the Gazda patent (shown below), the Gazda patent teaches that the flapper valve 254 engages with a downwardly facing seat surface 252, rather than with an upwardly facing seating element, as required by claim 1.



Claim 1 is anticipated by the Gazda patent, “[o]nly if each and every element as set forth in the claim is found, either expressly or inherently described” in a single prior

¹ See lines 13-14 of claim 1.

² See column 9, line 68, through column 10, line 10, of the Gazda patent.

art reference.”³ Further, “[t]he identical invention must be shown in as complete detail as is contained in the...claim.”⁴ The Gazda patent, however, falls short of these standards. Accordingly, the present invention, as set forth in claim 1, is not anticipated by the Gazda patent.

Further, the Gazda patent fails to render the present invention, as set forth in claim 1, obvious. There is no suggestion or motivation provided in the Gazda patent to modify the valve 35b to include an upwardly facing seat surface instead of the downwardly facing seat surface 252. Rather, if the valve 35b were so modified, it would become inoperable, as the flapper valve 254 swings from below the valve operator tube 201b and, thus, the flapper 254 would not be able to seat on an upwardly facing seat surface. “If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.”⁵ Thus, the Gazda patent fails to render the present invention, as set forth in claim 1, obvious.

Claims 3, 5, and 6 depend from claim 1. Accordingly, the remarks provided above concerning claim 1 apply equally to claims 3, 5, and 6.

Therefore, it is respectfully requested, that the rejection of claims 1, 3, 5, and 6 under 35 U.S.C. § 102(b), as being anticipated by the Gazda patent, be reconsidered and withdrawn.

³ See *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

⁴ See *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

⁵ See *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) and MPEP 2143.01.

35 USC § 103 REJECTIONS

Claims 2 and 4 are allowable over the Gazda patent in view of US 4,427,071

The rejection of claims 2 and 4 under 35 U.S.C. § 103(a), as being unpatentable over the Gazda patent in view of U.S. Patent 4,427,071 to Carmody (hereinafter referred to as “the Carmody patent”), is respectfully traversed for the reasons set forth below.

Claims 2 and 4 depend from claim 1 and, thus, each require that the sliding sleeve include “an upwardly facing seating element on which the valve member can seat.”⁶ As discussed above concerning claim 1, the Gazda patent fails to disclose or suggest such a configuration. The Carmody patent teaches that a flapper valve 20 seats against a valve seat 32 of an upper housing element 11 and is opened by extending an actuating sleeve 30. However, the Carmody patent does not disclose or suggest that the flapper valve 20 seats against the actuating sleeve 30 or that the actuating sleeve 30 includes an upwardly facing seating element.

Further claim 4 requires that “the valve member comprises a torsion spring member that urges the valve member towards a location between the open position and the closed position.”⁷ The Carmody patent, however, teaches only that the torsion spring is provided “to exert an upward pivotal bias on the flapper 20 urging it to its closed, sealed position.”⁸

To establish a *prima facie* case of obviousness, three basic criteria must be met⁹:

(1) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill

⁶ See lines 13-14 of claim 1.

⁷ See lines 2-3 of claim 4.

⁸ See column 2, lines 65-66, of the Carmody patent.

⁹ See MPEP 2143 and *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

in the art, rather than merely in Applicants' disclosure, to modify the reference or to combine reference teachings;

(2) There must be a reasonable expectation for success found in the prior art, rather than in Applicants' disclosure; and

(3) The prior art references must teach or suggest all the claim limitations.

The present invention, as set forth in claims 2 and 4, is allowable over the Gazda patent in view of the Carmody patent since the cited references fail to teach or suggest all the claim limitations, as discussed above. Further, the Carmody patent fails to provide any motivation to modify the apparatus thereof such that the torsion spring urges the flapper 20 towards a location between its open position and its closed position, as required by claim 4.

Accordingly, it is respectfully requested that the rejection of claims 2 and 4 under 35 U.S.C. § 103(a), as being unpatentable over the Gazda patent in view of the Carmody patent, be reconsidered and withdrawn.

Claims 40-43 and 46 are allowable over the Gazda patent

The rejection of claims 40-43 and 46 under 35 U.S.C. § 103(a), as being unpatentable over the Gazda patent, is respectfully traversed for the reasons set forth below.

Claim 40 requires, among other things, "selectively locking the flapper valve in the closed position."¹⁰ The indication on the record that the Gazda patent "fails to recite, *per se*, the exact steps as claimed"¹¹ is noted with appreciation. The further indication on the record that the Gazda patent "fails to recite, *per se*, the exact time at which the tool

¹⁰ See line 9 of claim 60.

string (32) is withdrawn from the tubing string or completion string (22)”¹² is also noted with appreciation. The Office Action also alleges that:

[T]he tool string (32) is peculiar since it can be withdrawn – the tool string (32) will be withdrawn from the well as desired in a peculiar wellbore operation. Therefore, it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to lock the flapper valve in a closed position after wellbore operations have been completed and to subsequently withdraw the tool string from the wellbore to realize the engineering requirements of a peculiar wellbore operation.

Applicants respectfully traverse this allegation. The Gazda patent fails to suggest that locking the flapper valve 254 would be possible or even desirable. “The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.”¹³ Merely disclosing that the tool string 32 may be withdrawn from the well is insufficient motivation to lead one skilled in the art to lock the flapper valve 254 or to even appreciate that locking the flapper valve 254 would be desirable. The prior art fails to disclose or suggest all of the claim limitations, which is required for a *prima facie* case of obviousness.¹⁴

Further claim 40, as amended, requires, among other things, “engaging the flapper valve with a sliding sleeve to close the flapper valve after completion operations have been performed.”¹⁵ The Gazda patent fails to disclose such a method. Rather, the Gazda patent teaches away from the claimed method, in that the valve operator tube 201b is disengaged from the flapper 254 to allow it to close. “It is by now well established that teaching away by the prior art constitutes *prima facie* evidence that the claimed invention

¹¹ See page 4, lines 16-17, of the present Office Action.

¹² See page 4, lines 20-22, of the present Office Action.

¹³ See *In re Gordon*, 221 U.S.P.Q. (BNA) 1125, 1127 (Fed. Cir. 1984); *In re Brouwer*, 37 U.S.P.Q.2d (BNA) 1663, 1666 (Fed. Cir. 1995); *In re Ochiai*, 37 U.S.P.Q.2d (BNA) 1127, 1131 (Fed. Cir. 1995).

¹⁴ See MPEP 2143 and *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

is not obvious.”¹⁶ Thus, for at least these reasons, the present invention, as set forth in claim 40, is allowable over the Gazda patent.

Claims 41-43 and 46 depend from claim 40. Accordingly, the remarks provided above concerning claim 40 apply equally to claims 41-43 and 46.

Therefore, it is respectfully requested that the rejection of claims 40-43 and 46 under 35 U.S.C. § 103(a), as being unpatentable over the Gazda patent, be reconsidered and withdrawn.

PROVISIONAL DOUBLE PATENTING REJECTION

The provisional rejection of claims 1, 2, 5, 6, 8, 9, 11-14 and 16-19 under 35 USC § 101, as claiming the same invention as that of claims 1-7, 12-16, 20, 21, 24, 26, 27, and 31-37 of co-pending Application No. 09/754,464, is respectfully traversed for the reasons set forth hereinafter.

MPEP 804 provides guidance in determining whether a statutory basis for a double patenting rejection exists:

In determining whether a statutory basis for a double patenting rejection exists, the question to be asked is: Is the same invention being claimed twice? 35 U.S.C. 101 prevents two patents from issuing on the same invention. “Same invention” means identical subject matter. *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1984); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957).

A reliable test for double patenting under 35 U.S.C. 101 is whether a claim in the application could be literally infringed without literally infringing a corresponding claim in the patent. *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970). Is there an embodiment of the invention that falls within the scope of one claim, but not the other? If there is such an embodiment, then identical

¹⁵ See lines 5-6 of claim 40.

¹⁶ See, *inter alia*, *In re Fine*, 5 U.S.P.Q.2d (BNA) 1596, 1599 (Fed. Cir. 1988); *In re Nielson*, 2 U.S.P.Q.2d (BNA) 1525, 1528 (Fed. Cir. 1987); *In re Hedges*, 228 U.S.P.Q. (BNA) 685, 687 (Fed. Cir. 1986).

subject matter is not defined by both claims and statutory double patenting would not exist.¹⁷

In the present application, claims 2, 5, 6 depend from claim 1. Claim 1, as amended, requires, among other things, a valve member and a sliding sleeve “having an **upwardly facing** seating element on which the valve member can seat.”¹⁸ Applicants respectfully assert that none of claims 1-7, 12-16, 20, 21, 24, 26, 27, and 31-37 of co-pending Application No. 09/754,464 recite such a limitation. Accordingly, none of claims 1-7, 12-16, 20, 21, 24, 26, 27, and 31-37 of co-pending Application No. 09/754,464 fall within the scope of claim 1. Therefore, the provisional rejection of claims 1, 2, 5, and 6 is improper and should be withdrawn.

Claim 8 in the present application has been amended to independent form and claims 9, 11, and 12 depend therefrom. Claim 8 requires a mandrel element. Only claims 12 and 20 of claims 1-7, 12-16, 20, 21, 24, 26, 27, and 31-37 of co-pending Application No. 09/754,464 recite a mandrel element. Claim 20 depends from claim 12. Claim 12 recites a spring element, which is not required by any of claim 8, 9, 11, or 12. Thus, the provisional rejection of claims 8, 9, 11, and 12 is improper and should be withdrawn.

Claim 13 of the present application recites that the valve member comprises a disk having a concave surface on one side and a convex surface on the other side. Only claim 24 of claims 1-7, 12-16, 20, 21, 24, 26, 27, and 31-37 of co-pending Application No. 09/754,464 recites such a limitation. Claim 24 depends from claim 1 of co-pending Application No. 09/754,464 and, as such, requires that “when the sliding sleeve is in the upper position, the valve member is held in the closed position **by the sliding sleeve.**”

¹⁷ See page 800-20 of the MPEP.

Claim 13 of the present application requires only that “when the sliding sleeve is in the upper position, the valve member is held in the closed position.” Thus, the provisional rejection of claim 13 is improper and should be withdrawn.

Claim 14 of the present application recites that “the valve member is connected to a collar element, the housing member further comprises a collar groove, the collar element is housed within the collar groove and the collar element comprises a collar notch to prevent the collar element from rotating within the collar groove.” Only claim 27 of claims 1-7, 12-16, 20, 21, 24, 26, 27, and 31-37 of co-pending Application No. 09/754,464 recites such a limitation. However, claim 27 fails to require that “when the sliding sleeve is in the upper position, the valve member is held in the closed position by the sliding sleeve”, as required by claim 14. Thus, the provisional rejection of claim 14 is improper and should be withdrawn.

Claims 16-19 of the present application depend from claim 7, which has been amended to independent form and is believed to be in condition for allowance. Thus, each of claims 16-19 require a sliding sleeve and a spring element such that “when the sliding sleeve is in the upper position, the spring element is in the compressed position.” None of claims 1-7, 12-16, 20, 21, 24, 26, 27, and 31-37 of co-pending Application No. 09/754,464 require such a limitation, which is evidenced by the fact that claim 7, from which claims 16-19 depend, is not included in the provisional double patenting rejection. Accordingly, the provisional rejection of claims 16-19 is improper and should be withdrawn.

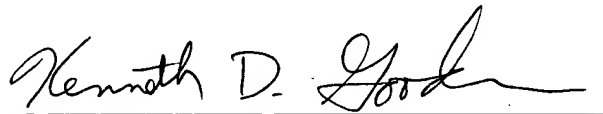
¹⁸ See lines 13-14 of claim 1.

Therefore, it is respectfully requested that the provisional rejection of claims 1, 2, 5, 6, 8, 9, 11-14 and 16-19 under 35 USC § 101, as claiming the same invention as that of claims 1-7, 12-16, 20, 21, 24, 26, 27, and 31-37 of co-pending Application No. 09/754,464, be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited. The Examiner is invited to contact Daren C. Davis at (817) 578-8616 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



Kenneth D. Goodman
Reg. No. 30,460

Attorney for Applicant

WILLIAMS, MORGAN & AMERSON
CUSTOMER NUMBER: 23720

10333 Richmond Dr., Suite 1100
Houston, Texas 77042
(713) 934-7000

Date: August 21, 2003